

## ABSTRACT

A semiconductor device may comprise a semiconductor substrate having a top and a bottom surface, first and second insulating layer deposited on the top surface of the substrate, a runner arranged on top of the second insulator layer, a backside metal layer deposited on the bottom surface of the substrate, a first via structure extending from the bottom surface of the substrate to the top of the first insulating layer between the backside layer and the runner, and a second via extending from the top of the first insulating layer to the top of the second insulating layer between the first via and the runner.